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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,937	01/31/2005	Norbert Herfert	29827/40800	8415

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EXAMINER	
SASTRI, SATYA B	
ART UNIT	**PAPER NUMBER**
1713	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/522,937	HERFERT ET AL.	
	Examiner	Art Unit	
	Satya B. Sastri	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *31 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/11/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to application filed on 1/31/05. Claims 1-29 are now pending in the application.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. ***Claim 2*** is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1of copending application 10/523,086 (published as US 2005/0245393 A1) to Herfert et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the reasons given below.

Copending claim recites surface crosslinked superabsorbent particles comprising about 50 to about 88% by wt. of superabsorbent polymer and 12% to 35% by wt. of clay.

The difference between the copending claim and the instant claim is that the particles are made by different processes.

Instant claim recites surface crosslinked superabsorbent particles comprising about 50-95% by wt. of a superabsorbent polymer and 5 to 50% by wt. of clay. Given that instant claim is a product by process claim, and recites the composition with the transitional phrase "comprising", it would have been obvious to a skilled artisan to include appropriate amounts of crosslinking agent, and thereby obtain the instant invention. Where product by process claims are rejected over a prior art product that appears to be the same, the burden is shifted to applicants to establish an unobvious difference, even if the production processes are different. Furthermore, the patentability of a product clam rests on the product formed and not on the method by which it is produced. In re Thorpe, 227, USPQ 984 (Fed. Cir. 1985).

4. Claim 2 is directed to an invention not patentably distinct from claim 1 of commonly assigned copending application 10/523,086 (US 2005/0245393 A1) to Herfert et al. Specifically, see the discussion set forth in paragraph 3 above.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned 10/523,086, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 7 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for anionic SAPs, does not reasonably provide enablement for cationic SAPs.

The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to perform the invention commensurate in scope with these claims. Specifically, instant claim 1 recites the product made by the process wherein the neutralization of the superabsorbent polymer-clay hydrogel is carried out by adding a sufficient amount of neutralizing agent. For cationic SAPs such as those recited in claim 7, the specification does not provide any direction as to what these neutralizing agents are.

Claim Rejections - 35 USC § 102 and 103

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1, 3-6, 8-11, 17-21 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mckinley et al. (US 4,500,670).

Mckinley et al. disclose water absorbent compositions exhibiting increased gel strength comprising a water swellable hydrophilic polymer and an inorganic powder, by physically blending the polymer and powder (abstract). The compositions may be incorporated into film laminates and can be employed in preparing improved disposable diapers. Preferred hydrophilic

polymers are polyelectrolytes, exemplary of which are ammonium or alkali metal slats of homopolymers of acrylic and methacrylic acid (col. 2, lines 9-17). Powders may be inorganic clays such as sodium bentonite, kaolinite or attapugite type (col. 2, lines 55-66). The polymer may be present, most preferably, from 25-60% (col. 3, lines 8-17).

Instant claims read on the composition as recited in the prior art. Where product by process claims are rejected over a prior art product that appears to be the same, the burden is shifted to applicants to establish an unobvious difference, even if the production processes are different. Furthermore, the patentability of a product clam rests on the product formed and not on the method by which it is produced. In re Thorpe, 227, USPQ 984 (Fed. Cir. 1985).

10. Claims 1, 3-6, 8, 9, 12-21, 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schulz (US 5,869,033) in view of Carrico et al. (US 5,856,410).

Prior art to Schulz discloses a fabric incorporating an organophilic clay, preferably dispersed in a matrix of superabsorbent polymer (abstract). About 3-50% by wt. of an organophilic clay may be

incorporated into a dermatological vehicle (col. 3, lines 15-20). The clay may also be incorporated into polymers such as crosslinked acrylic acid, methacrylic acid etc. The organophilic clay can be combined with the polymer, subsequent to polymerization, by any means that ensures adequate dispersal in the polymer matrix. For example, quarternium 18 bentonite can be dispersed as a finely divided suspension in an aqueous suspension of the superabsorbent polymer (col. 3, lines 50-67, column 4). A solid powder containing the clay can

be accomplished by conventional high shear mixing. The clay polymer mixture may be incorporated into diapers.

The difference between the instant invention and the prior art is that the prior art does not teach neutralization of the superabsorbent polymers.

The secondary reference discloses an improved method of manufacturing acrylic acid superabsorbent polymers by neutralizing the polymeric gel with a powdered or granular neutralizing agent. The prior art also discloses the neutralization process to be beneficial for optimum absorbency (col. 1, lines 55-60, abstract). Thus, it would have been obvious to a skilled artisan at the time the invention was made to neutralize the superabsorbent polymer clay mixtures of Schulz and thereby obtain the instant invention.

11. Claims 1, 3-6, 8-11, 17-21 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Payzant et al. (WO 00/72958 A1)

Payzant et al. disclose networked polymer/clay alloys produced from a monomer/clay mixture comprising monomer, a crosslinking agent and clay particles (abstract). The monomers may include acrylic acid, acrylamide, sodium acrylate etc. The clay particles may be the swelling or non-swelling type. The wt. ratio of clay to monomer may range from 0.05:1 to about 3:1 (page 2, lines 19-35 and page 7, lines 30). The monomer clay mixture may also include various buffering and/or neutralizing agents (page 8, lines 19-31). Such compositions may be used in personal care articles including diapers, training pants, feminine hygiene products etc. (page 1, lines 5-10).

Instant claims read on the composition as recited in the prior art. Where product by process claims are rejected over a prior art product that appears to be the same, the burden is shifted to applicants to establish an unobvious difference, even if the production processes are different. Furthermore, the patentability of a product clam rests on the product formed and not on the method by which it is produced. In re Thorpe, 227, USPQ 984 (Fed. Cir. 1985).

12. Claim 2 is rejected under 35 U.S.C. 103(a) as obvious over Payzant et al. (WO 00/72958 A1) in view of Henderson et al. (US 5,486,569).

The prior art to Payzant et al. is presented above in paragraphs 10 and is incorporated herein by reference.

The difference between the prior art and the instant invention is that the prior art does not explicitly teach surface crosslinked superabsorbent particles.

Henderson et al. disclose a method of enhancing the water or aqueous fluid absorption of polyacrylic SAP polymer particles by surface crosslinking the SAP polymer particles. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the step of surface crosslinking the SAP particles of Payzant et al. and thereby obtain the instant invention.

13. Claims 22-25 are rejected under 35 U.S.C. 103(a) as obvious over Payzant et al. (WO 00/72958 A1) in view of Biehoffer et al. (US 6596921 B2).

The prior art to Payzant et al. is presented above in paragraphs 10 and is incorporated herein by reference.

The difference between the prior art and the instant invention is that the prior art does not explicitly teach the details of a diaper structure.

Biehoffer et al. disclose absorbent structures having a core with at least 50% SAP particles and a diaper comprising a top sheet in contact with a first surface of the core, and a back sheet in contact with the second surface of the core. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the SAP particles of Payzant et al. in the diaper as disclosed by and thereby Biehoffer et al. obtain the instant invention.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satya Sastri at (571) 272 1112.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached at (571) 272 1114.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SATYA SASTRI

March 28, 2007

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